



Virginia Department of
Emergency Management

Commonwealth of Virginia 9-1-1 Services Board FY 2021 Annual Report

October 1, 2021



The *Code of Virginia* (§56-484.14) requires the 9-1-1 Services Board (the “Board”) to report annually to the Governor, the Senate Committee on Finance, the House Committee on Appropriations, and the Virginia State Crime Commission on the following:

- (i) the state of enhanced 9-1-1 services in the Commonwealth,
- (ii) the impact of, or need for, legislation affecting enhanced 9-1-1 services in the Commonwealth,
- (iii) the need for changes in the E-911 funding mechanism provided to the Board, as appropriate, and
- (iv) monitor developments in enhanced 9-1-1 service and multi-line telephone systems and the impact of such technologies upon the implementation of Article 8 (§ 56-484.19 et seq.) pursuant to subdivision 6.

➤ *The state of enhanced 9-1-1 services in the Commonwealth*

The 9-1-1 Services Board is leading Virginia’s efforts to transform an outdated 9-1-1 system into a digital network that is faster, more efficient, and has greater Public Safety Answering Point (PSAP) capabilities to better serve its citizens and visitors for years to come. Overall the 9-1-1 system relies on technology that is decades old and tied to voice-centric communications. This outdated infrastructure is being replaced by newer and more resilient technology. The commonwealth must move forward in its evolution of enhanced 9-1-1 technology in order to ensure high-quality, state-of-the-art services to its citizens and visitors.

To accomplish this transformation, the Board has planned for and initiated the processes (Figure 1) for moving Virginia PSAPs to a Next Generation 9-1-1 (NG9-1-1) system. NG9-1-1 is based on a modern internet protocol (IP) network, that has the ability to deliver calls to the appropriate 9-1-1 center faster, transfer 9-1-1 calls and associated data anywhere as needed, interconnect with other public safety systems and databases, and to securely receive multimedia communications like text, photos and videos in an efficient and timely manner. As service providers begin abandoning the legacy circuit-switched technology, there is an urgency to update the 9-1-1 infrastructure to NG9-1-1. Actions to transform the outdated system to a new digitally based network that is faster, more efficient, and has greater capabilities to serve Virginia’s citizens is underway. The *Code of Virginia* [§56-484.16](#) requires full implementation of NG9-1-1 by July 1, 2023.

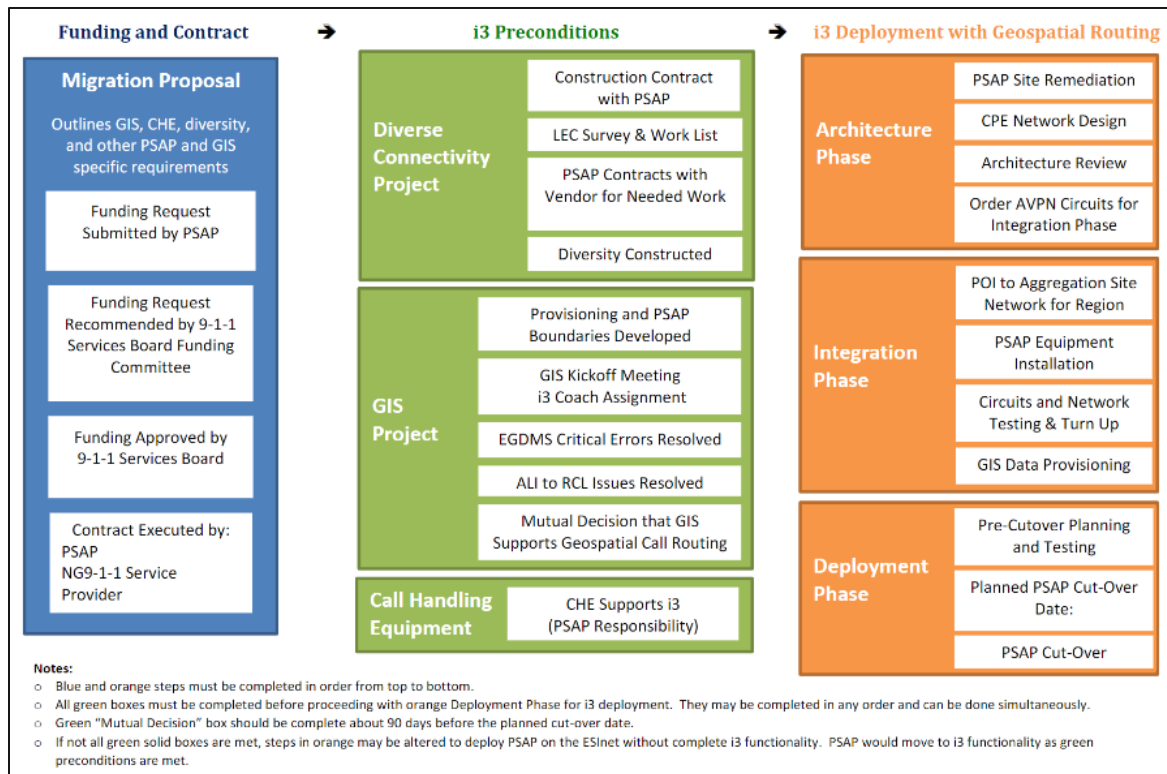


Figure 1: Overall NG9-1-1 Deployment Steps

Currently, the 9-1-1 Services Board’s focus is on the deployment of NG9-1-1. There is a legislative mandate for the Board to develop and fully implement NG9-1-1 transition plans to migrate PSAPs from E-911 to NG9-1-1 by July 1, 2023. After this date, the Board must be ready to execute a plan that establishes its vision of the enhanced NG9-1-1 ecosystem and related priorities for the utilization of the ESInet.

The Board established the necessary 9-1-1 governance structure to achieve the above goal. This structure consists of the 9-1-1 Services Board and its four standing committees: Finance, PSAP Grant, Legislative, and Regional Advisory (Figure 2). The Finance Committee support the Board in fulfilling its financial obligations as enumerated in [§56-484.14](#) of the *Code of Virginia* and in accordance with establish Board policy. The purpose of the Finance Committee is to recommend grant guidelines and funding priorities to the Board for the implementation of the statewide NG9-1-1 emergency communications system and addressing training/educational needs of public safety communications and GIS personnel (in support of 9-1-1). The focus of the Legislative Committee is to review federal 9-1-1 legislative activities and to recommend a legislative agenda for Virginia’s General Assembly sessions. The Regional Advisory Committee studies and make recommendations regarding the implementation of the statewide NG9-1-1

emergency communications system and its impact on Virginia’s current and future 9-1-1 ecosystem.

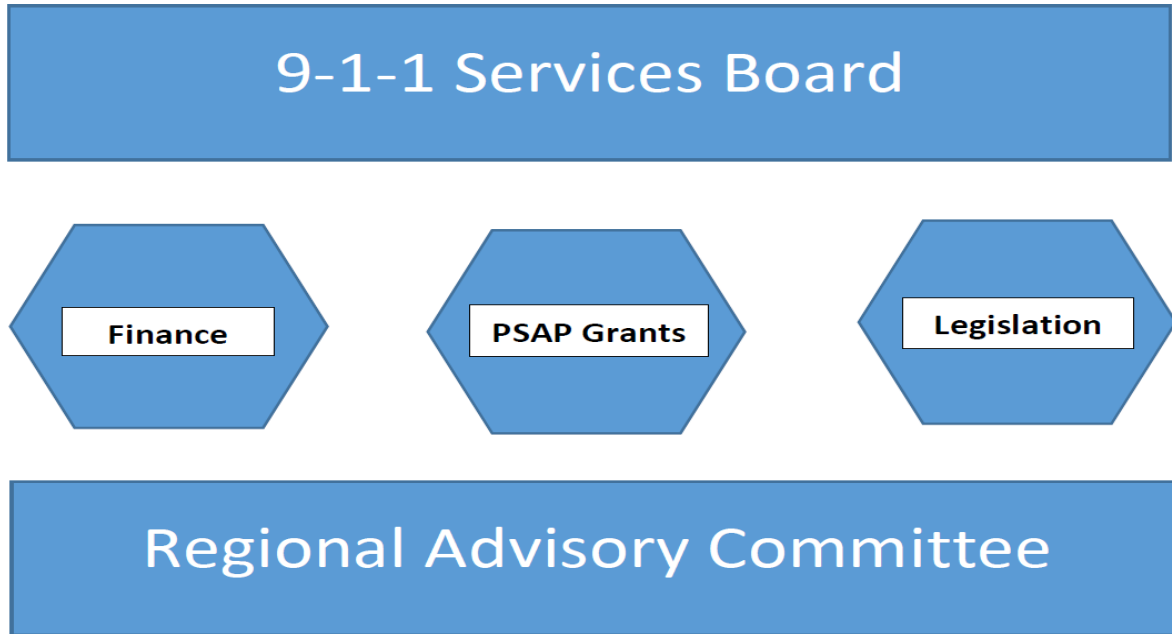


Figure 2: Virginia’s 9-1-1 Governance Structure

Throughout FY 2021, the Board has made significant progress on the deployment of NG9-1-1. The following metrics pertain to the status of tasks related to separate deployment projects for 124 localities:

- 98% - Contract Signed/Countersigned between PSAP and AT&T
- 80% - Special Construction Started
- 61% - Special Construction Completed
- 67% - PSAP Call Delivery Circuits (AVPN) Ordered
- 50% - PSAP Call Delivery Circuits (AVPN) Complete
- 38% - AT&T/Intrado Project Manager Assigned
- 31% - SS7 (Legacy Interoperability) Trunks Ordered
- 25% - SS7 (Legacy Interoperability) Trunks Complete
- 27% - GIS Data Provisioned to ECRF
- 20% - ORT & Cutover Dates Identified
- 7% - PSAPs Deployed

The number of wireless 9-1-1 calls also continues to grow. Currently, 80 percent of all the 9-1-1 calls received by Virginia PSAPs are from a wireless device.

Because of the above efforts, Virginia continues to be a nationally recognized leader in 9-1-1 and the Board has positioned itself strategically to address any emerging challenges to the commonwealth's 9-1-1 ecosystem.

➤ *The impact of, or need for, legislation affecting enhanced wireless emergency telecommunications services in the Commonwealth*

Currently, the Board's Legislative Committee is reviewing the need for 9-1-1 legislation to support its vision of the enhanced NG9-1-1 ecosystem and related priorities for the utilization of the ESInet.

➤ *The need for changes in the E-911 funding mechanism provided to the Board, as appropriate*

The Board directed the 9-1-1 and Geospatial (NGS) Bureau Chief to move forward with a 9-1-1 Cost Study. The resulting study will generate an analysis of local 9-1-1 costs and make recommendations related to future revenue and funding strategies.

The purpose of the study is to determine the statewide cost of 9-1-1 in Virginia, identify potential efficiency improvements, determine adequacy of current revenue stream, and short- and long-term impacts on localities. The Board recommended the formation of a committee to provide recommendations on NG9-1-1 costs. The NG9-1-1 Sustainable Funding Committee, a NGS Bureau committee, determined that local 9-1-1 expenses are increasing much more rapidly than the Wireless E-911 Fund. This study should determine statewide 9-1-1 costs, and trends related to these costs, through an analysis of primary PSAP operational expenses over the past five fiscal years. It should also include projections or recommendations on future NG9-1-1 costs and investment requirements, as well as anticipated trends. The Board is particularly interested in strategies to establish an equity-based approach to statewide funding that utilizes metrics and criteria for determining most at-risk PSAPs.

➤ *Monitor developments in enhanced 9-1-1 service and multi-line telephone systems*

This is a duty of the Board that was enacted on July 1, 2007. Most of the provisions of Article 8 (§ 56-484.19 et seq.) of Chapter 15 of Title 56 took effect on July 1, 2009. The Board continues to monitor developments.